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EXAMINER

TORRES VELAZQUEZ, NORCA LIZ

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Please find below and/or attached an Office communication concerning this application or proceeding.

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KENNETH BRADLEY CLOSE, GARY V. ANDERSON,
DAVID JON BAER, THOMAS JOSEPH KOPACZ, JEFFREY DEAN
LINDSAY, FUNG-JOU CHEN, and JULIE MARIE BEDNARZ

Appeal 2008-4985
Application 10/748,454
Technology Center 1700

Decided:¹ March 11, 2009

Before EDWARD C. KIMLIN, TERRY J. OWENS, and
KAREN M. HASTINGS, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

The Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-92. We have jurisdiction under 35 U.S.C. § 6(b).

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the Decided Date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

The Invention

The Appellants claim a nonwoven material and products that include it. Claim 1, which claims the nonwoven material, is illustrative:

1. A nonwoven material having a first exterior surface and second exterior surface exhibiting reduced lint and slough comprising:

a nonwoven web comprising pulp fibers, the nonwoven web having a first side and a second side; and

meltblown fibers applied to the first side of the nonwoven web, the meltblown fibers being distributed over the surface of the first side of the nonwoven web, the meltblown fibers forming the first exterior surface of the nonwoven material, the meltblown fibers being present in an amount less than about 8 gsm.

The References

Storey	4,784,892	Nov. 15, 1988
Skoog	6,177,370 B1	Jan. 23, 2001
Lange	2002/0127937 A1	Sep. 12, 2002
Garnier	6,861,380 B2	Mar. 1, 2005
Richards	WO 99/13860	Mar. 25, 1999

The Rejections

The claims stand rejected under 35 U.S.C. § 103 as follows: claims 1-8, 10, 12-14, 16, 21-24, 27-41, 43-48, 50, and 52-76 over Storey in view of Skoog; claims 24, 30, 31, 66, 68, and 72 over Storey in view of Skoog and Richards; claims 9, 11, 15, 17-20, 42, 49, and 51 over Storey in view of Skoog and Garnier; and claims 25, 26, and 77-92 over Storey in view of Skoog, Lange and Richards.

OPINION

We affirm the Examiner's rejections.

The Appellants argue only the independent claims, in the following groups: 1) claims 1, 32, and 55, and 2) claim 77 (Br. 4-12). We therefore limit our discussion to claim 77 and one claim in the first group, i.e., claim 1. Claims 2-76 stand or fall with claim 1, and claims 78-92 stand or fall with claim 77. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2007).

Claim 1

Issue

Have the Appellants shown reversible error in the Examiner's determination that Storey and Skoog would have rendered *prima facie* obvious, to one of ordinary skill in the art, a nonwoven material comprising a nonwoven web having on a side thereof less than about 8 gsm of meltblown fibers that form the exterior surface of that side of the nonwoven material?

Findings of Fact

Storey discloses a nonwoven material comprising an inner layer (18) of meltblown polymeric microfibers intermixed with wood pulp fibers sandwiched between two outer layers (8, 20) of meltblown polymeric microfibers having a minimum weight of about 10 gsm (col. 1, ll. 9-22, 31-38; col. 2, ll. 35-38; col. 3, ll. 21-37; Fig. 2). The outer layers provide good durability and low linting (col. 2, ll. 6-7).

Skoog discloses a nonwoven material comprising a layer (164) of short fibers sandwiched between two meltblown fiber layers (128, 148) which are sandwiched between two spunbond fiber layers (124, 144) (col. 5, ll. 21-29). The spunbond fiber layers provide strength, durability, and abrasion resistance, and the meltblown fiber layers prevent linting by trapping material from the layer of short fibers (col. 5, ll. 29-34). The

meltblown fiber layers may have a basis weight of about 2 gsm to about 34 gsm (col. 5, ll. 43-53).

Analysis

The Appellants argue that because Storey's outer layer is for durability, one of ordinary skill in the art would not have used a basis weight of the outer layer that is less than Storey's minimum of about 10 gsm (Br. 6).

Storey discloses that "[d]ifferent materials may be used for the outer layers depending upon the durability or other surface characteristics required" (col. 2, ll. 12-14). That disclosure would have led one of ordinary skill in the art who did not require high durability to use an amount of meltblown fibers that may provide relatively low durability but is sufficient to provide Storey's other meltblown microfiber layer characteristics such as low linting (col. 2, ll. 6-7). As indicated by Skoog (col. 5, ll. 49-53), a meltblown fiber layer basis weight as low as about 2 gsm is sufficient to prevent linting by trapping material from a short fiber layer sandwiched between two of the meltblown fiber layers (col. 5, ll. 31-34; Fig. 3). Thus, the applied references would have led one of ordinary skill in the art, through no more than ordinary creativity, to use an amount of meltblown microfibers in Storey's nonwoven material such as the Appellants' amount of less than about 8 gsm to provide the desired degree of delinting, such as the 30% obtained by the Appellants (Spec. 7:1-2: 18:33–19:1), when high durability is not required. *See KSR Int'l. Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) (In making an obviousness determination one "can take account of the inferences and creative steps that a person of ordinary skill in the art would employ").

The Appellants argue that because Skoog's spundbond fibers, rather than the meltblown fibers, are on the exterior surface, Storey and Skoog do not disclose all of the Appellants' claim limitations (Br. 8-11).

Although Skoog's meltblown fiber layers 128 and 148 are interior to Skoog's spundbond layers 124 and 144, they are exterior to short fibers 160 from which they trap lint (col. 5, ll. 31-34; Fig. 3). Hence, Skoog would have led one of ordinary skill in the art, through no more than ordinary creativity, to use Skoog's relatively low amounts of meltblown fibers in Storey's nonwoven material when lint trapping, but not high strength, durability and abrasion resistance, is desired.

Conclusion of Law

The Appellants have not shown reversible error in the Examiner's determination that Storey and Skoog would have rendered prima facie obvious, to one of ordinary skill in the art, a nonwoven material comprising a nonwoven web having on a side thereof less than about 8 gsm of meltblown fibers that form the exterior surface of that side of the nonwoven material.

Claim 77

The Appellants argue that Lange and Richards do not correct the deficiencies of Storey and Skoog with respect to the requirement of about 8 gsm of meltblown fibers that form an exterior surface of the nonwoven material (Br. 11-12).

As discussed above regarding claim 1, those deficiencies do not exist. Hence, we are not persuaded of reversible error in the rejection of claim 77.

DECISION/ORDER

The rejections under 35 U.S.C. § 103 of claims 1-8, 10, 12-14, 16, 21-24, 27-41, 43-48, 50, and 52-76 over Storey in view of Skoog, claims 24, 30, 31, 66, 68, and 72 over Storey in view of Skoog and Richards, claims 9, 11, 15, 17-20, 42, 49, and 51 over Storey in view of Skoog and Garnier, and claims 25, 26, and 77-92 over Storey in view of Skoog, Lange, and Richards are affirmed.

It is ordered that the Examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

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